

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Lonzell GRAHAM, et al.

Divisional Application under 37 C.F.R. 1.53(b)
of Application No.: 08/769,391

Filed: November 7, 2001

For: METHOD OF MAKING A LAUNDRY
DETERGENT ARTICLE CONTAINING
DETERGENT FORMULATIONS
(As Amended)

Prior Application:

Group Art Unit: 1771

Examiner: E. Cole

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

PRELIMINARY AMENDMENT

Prior to examination, please amend the application as follows:

IN THE TITLE:

Please replace the existing title with the following new title:

-- METHOD OF MAKING A LAUNDRY DETERGENT ARTICLE CONTAINING
DETERGENT FORMULATIONS --

IN THE CLAIMS:

Please cancel claims 1-25 without prejudice or disclaimer, and substitute the
following amended claims 26, 27, and 31 for pending claims 26, 27, and 31:

26. (Amended) A process for producing a laundry detergent article
comprising:

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- a) preparing a detergent formulation comprising a slurry, said slurry comprising amphoteric, nonionic or anionic surfactants, and a builder, wherein said slurry has a viscosity in a range that permits coating a substrate;
- b) applying said detergent formulation to a needlepunched, nonwoven substrate comprising fibers having a melting point of approximately 300°F or greater; and
- c) drying said detergent formulation and substrate until it forms said laundry detergent article that is dry to the touch and which does not substantially transfer detergent to other surfaces or to the skin when handled.

27. (Amended) The process of claim 26, wherein said substrate is supported in a horizontal and flat position while said substrate and detergent formulation dry.

31. (Amended) The process of claim 28, wherein said slurry is applied to achieve from 36 to 42 ounces per square yard of wet coating.

Please add the following new claims 32-53:

-- 32. The process of claim 26, wherein said detergent formulation further comprises at least one component chosen from a complexing agent, an alkaline source, an optical brightener, an electrolyte, a foam stabilizer, a fragrance, a color

enhancer, a biocide, a corrosion inhibitor, a soil anti-redeposition agent, an encrustation preventer, a fabric softener, an oxidizing agent, an enzyme, and a dye transfer inhibition agent.

33. The process of claim 26, wherein said surfactant comprises at least one component chosen from a linear primary alcohol ethoxy sulfate, a linear alkyl benzene sulfonate, an alcohol sulfate, a sodium or potassium salt of a long chain fatty acid, a secondary alkane sulfonate, an α -olefin sulfonate, a cocoamphocarboxylipropionate, and a methylester sulfonate.

34. The process of claim 26, wherein said nonionic surfactant is an alcohol ethoxylate, an alkylphenol ethoxylate, an ethyleneoxide/propyleneoxide block copolymer, an alkyl polyglycoside, an alkanolamide, an amine ethoxylate, or an amine oxide.

35. The process of claim 26, wherein said anionic surfactant is a alkylated sulfonated diphenyl oxide disodium salt or a dioctyl sulfosuccinamate.

36. The process of claim 26, wherein said needlepunched, nonwoven substrate is a polyester material.

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37. The process of claim 26, wherein said builder is a borate, a phosphate, a polyphosphate, a silicate, a carbonate, a citrate, an ethylenediaminetetracetate, or a nitrilotriacetate.

38. The process of claim 37, wherein said builder is a zeolite.

39. The process of claim 32, wherein said optical brightener comprises bistriazinyl aminostilbene.

40. The process of claim 26, wherein said alkaline source is sodium carbonate, sodium silicate, a polymethacrylate, or a methacrylate maleic anhydride copolymer.

41. The process of claim 32, wherein said electrolyte is sodium carbonate.

42. The process of claim 32, wherein said foam stabilizer is an alkanolamide, an amine oxide, or a dioctylsulfosuccinamate.

43. The process of claim 32, wherein said biocide is sodium omadine.

44. The process of claim 32, wherein said corrosion inhibitor is a sodium silicate or a sodium polysilicate.

45. The process of claim 32, wherein said soil anti-redeposition agent is an isobutylene/maleic anhydride copolymer sodium salt, sodium polyacrylate, sodium polymaleic acid/olefin, sodium polyacrylic acid maleic acid salt, or a sodium polymethacrylate.

46. The process of claim 32, wherein said fabric softener is a quaternary ammonium compound.

47. The process of claim 46, wherein said quaternary ammonium compound further contains at least one polyethoxy or polypropoxy side chain sufficient to keep a 1% solution of the quaternary ammonium compounds soluble in water at approximately 25°C.

48. The process of claim 26, wherein said detergent formulation comprises a sodium salt of a dodecyl benzene sulfonic acid, an alkylated sulfonated diphenyl oxide disodium salt, a zeolite, a bistriazinylaminostilbene, sodium carbonate, an amine oxide or an alkanol amine, a sodium silicate or sodium polysilicate, an isobutylene/maleic

anhydride copolymer or a sodium polymethacrylate, and a quaternary ammonium compound.

49. The process of claim 48, wherein said quaternary ammonium compound has at least one polyethoxy or polypropoxy side chain sufficient to keep a 1% solution of the quaternary ammonium compounds soluble in water at about 25°C.

50. A laundry detergent article made by the process of claim 26.

51. A laundry detergent article made by the process of claim 32.

52. A laundry detergent article made by the process of claim 48.

53. The process of claim 26, wherein said viscosity ranges from 4,500-9000 cps.

REMARKS

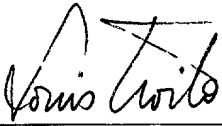
I. Status of the Claims

Claims 26-53 are pending in this application. Claims 1-25 have been canceled without prejudice or disclaimer. Claims 26, 27, and 31 have been amended to better define the claimed invention. Support for the amendments, as well as for new claims 32-53, can be found in the original claims and generally throughout the specification. See, e.g., page 3, lines 6-14 and Process Example 1 on pages 25-26 of the present specification. Accordingly, no new matter is believed to have been added by the amendments.

Applicants await an action on the merits, and timely allowance of the pending claims. If there is any fee due in connection with the filing of this Amendment, please charge the fee to our Deposit Account No. 06-0916.

Respectfully submitted,

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By: 

Louis M. Troilo
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Date: November 7, 2001

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**Amended Claims With Markings to Show Changes Made
By Preliminary Amendment of November 8, 2001**

IN THE TITLE:

Please replace the existing title with the following new title:

-- METHOD OF MAKING A LAUNDRY [SHEET] DETERGENT ARTICLE
[CONTAINING A DETERGENT AND LAUNDRY DETERGENT FORMULATIONS
LAUNDRY DETERGENT ARTICLE] CONTAINING DETERGENT FORMULATIONS --

IN THE CLAIMS:

26. (Amended) A process for [making] producing a laundry [sheet] detergent
article comprising:

a) preparing a detergent formulation said slurry comprising amphoteric,
nonionic or anionic surfactants, and a builder, wherein said slurry has a viscosity in a
range that permits coating a substrate;

b) applying said detergent formulation [onto a substrate] to a
needlepunched, nonwoven substrate comprising fibers having a melting point of
approximately 300°F or greater; and

c) drying said detergent formulation and substrate until it forms said laundry
detergent article that is dry to the touch and which does not substantially transfer
detergent to other surfaces or to the skin when handled.

27. (Amended) The process of claim 26, wherein [said detergent formulation
is an homogeneous slurry and] said substrate is supported in a horizontal and flat
position while said substrate and detergent formulation [dries] dry.

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31. (Amended) The process of claim 28, wherein [the detergent formulation
an homogeneous slurry and] said slurry is applied to achieve from 36 to 42 ounces per
square yard of wet coating.